REMARKS and ARGUMENTS

This amendment responds to the Office action dated June 02, 2009.

Claims 1-5 are pending in the application.

Claims 1 and 3-5 are independent claims. Claim 2 depends from claim 1 and, therefore, comprises all the limitations therein.

Claims 1, 3, 4 and 5 have been amended.

The Examiner has rejected claims 1, 2 and 4 under 35 U.S.C. §103(a) as being unpatentable over Burns et al., U.S. Patent No. 5,995,518, hereinafter "Burns," in view of Hakenberg et al., U.S. Patent Application Publication No. 2004/0025184, hereinafter "Hakenberg," and further in view of Krishnamurthy et al., U.S. Patent No. 6,665,872, hereinafter "Krishnamurthy."

Independent claim 1 and independent claim 4 have been amended.

Independent claim 1 has been amended and comprises the elements of:

> "deriving from that engaged data stream, two downstream-deliverable video data streams that are characterized by differing, respective decoder access latencies and spatial resolutions, one of which downstream-deliverable video data streams is characterized, relatively speaking, by a low decoder access latency and a low spatial resolution, and the other of which is characterized, in comparison, by a higher decoder access latency and a higher spatial resolution, wherein, relatively speaking, said low decoder access latency is associated with more closely spaced I-frames in said one downstream-deliverable

> video data stream in comparison to more widely separated I-frames in said other downstream-deliverable video data stream;"

which is not taught in the combination of Burns, Hakenberg and Krishnamurthy.

Independent claim 4 is a system claim corresponding to the method claim of independent claim 1. Claim 4 has been similarly amended to claim 1 and comprises the elements of:

> "deriving structure operatively connected to said engaging structure, operable to derive two, downstream-deliverable video data streams from such an engaged source data stream, wherein said two, downstream-deliverable video data streams are characterized by differing, respective decoder access latencies and spatial resolutions, one of which downstream-deliverable video data streams is characterized, relatively speaking, by a low decoder access latency and a low spatial resolution, and the other of which is characterized, by comparison, by a higher decoder access latency and a higher spatial resolution, wherein, relatively speaking, said low decoder access latency is associated with more closely spaced I-frames in said one downstream-deliverable video data stream in comparison to more widely separated I-frames in said other downstream-deliverable video data stream;"

which is not taught in the combination of Burns, Hakenberg and Krishnamurthy.

Regarding these elements of independent claims 1 and 4, the combination of Burns, Hakenberg and Krishnamurthy does not teach or suggest deriving, from a source data stream, two video data streams, wherein one of the two video data streams is associated with lower decoder access latency and lower spatial resolution than the other video data stream.

Of the three cited references, Burns is the only reference teaching separation of information into two components. Burns teaches separating information into two components in order to transmit the information over two communication channels, wherein the two communication channels have different communication latencies [at least, column 1, line 63 – column 2, line 30]. The latency disclosed in Burns is the communication latency of a communication channel. Burns does not teach or suggest deriving two video data streams from a source data stream, where each of the two video data streams has a different decoder access latency and video spatial resolution than the other. Furthermore, neither of the two additionally cited references teaches modifying the separation, as taught by Burns, to include derivation of two video data streams from a source data stream, where each of the two video data streams has a different decoder access latency and video spatial resolution. One of the two components of Burns is used to modify or augment the other [at least, ABSTRACT, lines 12-15]. The two components are not representations of the same information at different spatial resolution and decoder access latency as effectuated by I-frame spacing.

Hakenberg does not teach or suggest derivation of two video data streams from a source data stream. The methods and systems disclosed in Hakenberg teach retransmission of data in response to data loss due to an unreliable communication channel. There is no teaching of deriving multiple data streams from a source data stream according to decoder access latency and spatial resolution.

The Examiner has argued that the method of Hakenburg teaches sending only I-frames (no spacing) which inherently will not have the additional frames to enhance the quality (lower resolution). The differing resolutions of the two streams of the currently

claimed embodiments of the applicant's present invention relate to spatial resolution. The retransmitted I-frame-only video stream of Hakenburg is necessarily the same spatial resolution as the original video stream of Hakenburg from which the frames were dropped in the original transmission. Thus, the I-frame-only video stream of Hakenburg does not teach this element on which Burns is silent.

The Examiner argues that:

> "Although, Hakenberg teaches stream with no spacing in between I-frames, this is still interpreted as a spatial resolution. The amendment changing the resolution to "spatial resolution" is not sufficient to further limit the scope around Hakenberg's ability to transmit a space-less stream of only I-frames."

Spatial resolution is a term of art unrelated to the spacing of I-frames. The spacing of I-frames in a video sequence is related to the decoder access latency in that a decoder may access a video stream at an I-frame. Spatial resolution is a feature of an image frame in a video sequence, not a feature relating the spacing between image frames in a video sequence. Thus, Hakenberg does not teach differing spatial resolutions. Furthermore, if Hakenberg teaches streams with no spacing between I-frames, then there is necessarily no teaching for different streams with different I-frame spacing, only streams with no spacing, and, hence, no teaching for different streams with differing decoder access latencies.

Krishnamurthy does not teach or suggest derivation of information for transmission at all. Krishnamurthy teaches transmission of video streams corresponding to different video applications over a single shared communication channel, wherein a multiplexer and traffic controller takes into account the differing latency requirements of

the various video applications [at least, column 2, line 66 – column 3, line 11]. Thus Krishnamurthy does not teach these elements on which Burns is silent and on which Hakenberg cannot be relied to teach.

Based on the lack of teaching of the above-listed claim elements in the combination of Burns, Hakenberg and Krishnamurthy, independent claims 1 and 4 are allowable in their current form. The applicant respectfully requests the rejection of these claims be withdrawn.

Claim 2, which depends from claim 1 and, therefore, comprises all the limitations therein, is currently allowable based on amended claim 1. The applicant respectfully requests this rejection of claim 2 be withdrawn.

The Examiner has rejected claims 3 and 5 under 35 U.S.C. §103(a) as being unpatentable over Burns et al., U.S. Patent No. 5,995,518, hereinafter "Burns," in view of Hakenberg et al., U.S. Patent Application Publication No. 2004/0025184, hereinafter "Hakenberg," and further in view of Lin et al., U.S. Patent Application Publication No. 2002/0095681, hereinafter "Lin."

Independent claim 3 and independent claim 5 have been amended.

As amended, independent claims 3 and 5 comprise the element of:

> "compressed video data which is characterized by a pair of prior-derived video data streams, one of which is further characterized by one decoder access latency and one spatial resolution, and the other of which is further characterized by another decoder access latency which is larger than the mentioned one decoder access latency, and another spatial resolution which is larger than the mentioned one spatial

> resolution, and where such decoder access latencies are differentiated by different time spacings that exist between designated video I-frames placed in the data streams, with larger spacings between such I-frames relating to larger decoder access latencies, and with smaller spacings between such I-frames relating to smaller decoder access latencies,"

which is not disclosed in the cited combination of references.

As argued above in relation to claims 1 and 4, the combination of Burns and Hakenberg does not teach deriving two video data streams with differing decoder access latencies and differing spatial resolutions, wherein decoder access latency is differentiated by I-frame spacing. Nor does the combination of Burns, Hakenberg and Lin teach this element. Lin teaches an apparatus and method of transmitting and switching multimedia data over an Ethernet network [at least, ABSTRACT].

Additionally, independent claim 3 comprises the elements of:

> "seeking access to the received, two-video-data-stream characterized video data,
> in relation to said seeking, monitoring the two, associated video data streams to detect the first occurrence in either stream of an I-frame,
> on detecting such an occurrence, selecting the associated data stream to be the source for a viewable output stream, and
>
> (a) if the first detected occurrence involves an I-frame in the mentioned other video data stream, ending the monitoring and selecting process, but
>
> (b) if the first detected occurrence involves an I-frame in the mentioned one video data stream, continuing to monitor the other video data stream to detect therein the first next occurrence of an I-frame, and on that detection taking place, switching to and selecting

that other video data stream to be the source for a viewable output stream, and then ending the monitoring and selecting process."

These elements are not taught in the cited combination of art. Specifically, neither Burns nor Hakenberg disclose monitoring data for I-frames, or other marker frames. Lin teaches reserving channel path based on channel allocation priority data, and transmitting higher priority data and blocking lower priority data [at least, paragraphs [0049], [0050]]. Lin teaches sending channel allocation priority data in a payload addressed to a master switch [paragraph [0049]]. This address-directed transmission of priority data is not the same as monitoring two sources for a marker (I-frame). Monitoring for the occurrence of an event is distinct from receipt of information indicating the relative importance (priority information) associated with a portion of data. In the currently claimed embodiments of the applicant's present invention, the occurrence of an I-frame is the event triggering the action. In Lin, the received priority information associated with a portion of data must be examined and compared to other priority information associated with other data, and the trigger is the result of the comparison. The applicant respectfully disagrees with the Examiner's argument that "Determining the priority based on the marker frames is essentially the same action as monitoring priority data and performing an action based on it."

The cited combination of art does not teach setting a source for a viewable output stream based on the occurrence of I-frames. Further, the combination does not teach ending monitoring when an I-frame in a higher access latency video data stream is received. The Examiner argues that "according to the flow chart of fig. 12, after the signal corresponding to the higher delay (latency) is delayed, the process ends (1280)."

Figure 12 does not depict monitoring, and therefore, the end of the flowchart is not related to the end of monitoring. As such, the applicant respectfully disagrees with the Examiner that Lin teaches ending monitoring when time-sensitive data is received.

Independent claim 5 is an apparatus claim corresponding to the method claim of independent claim 3. Claim 5 comprises corresponding elements as those stated above in reference to claim 3, and the above arguments hold for claim 5 also.

Based on these arguments, the applicant therefore requests this rejection of claims 3 and 5 be withdrawn.

In light of the arguments above, all claims are considered to be novel, non-obvious and patentable in view of the cited art. The applicant respectfully requests that the Examiner reconsider the rejections of these claims. The Examiner is invited to contact applicant's patent agent directly for any reason.

Based on the foregoing amendments and remarks, the applicant respectfully requests reconsideration and allowance of the present application.

Respectfully submitted,

/Kristine Elizabeth Matthews/

Kristine Elizabeth Matthews
Reg. No. 60,040
Tel. No.: (360) 210-4764